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# Final
# Massachusetts
# State Implementation Plan Revision to Meet Clean Air Act Section 110(a)(2)(D)(i) Interstate Air Pollution Transport Requirements

## JANUARY 31, 2008

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# I Introduction

In this State Implementation Plan (SIP) revision, the Massachusetts Department of Environmental Protection (MassDEP) demonstrates that Massachusetts has met its obligations to address the interstate transport of air pollution from Massachusetts sources as required by the federal Clean Air Act and by the finding of the U.S. Environmental Protection Agency (EPA) that states failed to submit SIPs addressing transported air pollution within three years of the 1997 promulgation of new National Ambient Air Quality Standards (NAAQS) for ozone and fine particles ($PM_{2.5}$).

# II Background on SIP Requirement

## A. Clean Air Act Requirements

Section 110(a)(1) of the Clean Air Act requires that within three years after EPA promulgates a NAAQS, each state must adopt a SIP that provides for the implementation and maintenance of the new or revised standard. Implementation of the new NAAQS for ozone and $PM_{2.5}$, promulgated by EPA in 1997, was delayed for years due to litigation. EPA did not finalize attainment/nonattainment designations for the ozone standard until June 2004,[1] and for the $PM_{2.5}$ standard until April 2005.[2] Consequently, states were not able to submit SIPs in 2000, as required by Section 110(a)(1).

Section 110(a)(2) of the Clean Air Act sets out specific requirements for SIPs, and includes Section 110 (a)(2)(D)(i), which pertains to the interstate transport of emissions. It requires that SIPs contain provisions adequate to prohibit emissions within a state from:

1. Contributing significantly to nonattainment in another state, or interfering with maintenance of a NAAQS by any other state; or
2. Interfering with another state's plans to prevent significant deterioration of air quality or to protect visibility.

In March 2004, Environmental Defense and the American Lung Association initiated legal action against EPA for failure to determine whether states had submitted SIPs following promulgation of the new NAAQS. As part of a consent decree in that action, in April 2005, EPA issued a rule finding[3] that all 50 states had failed to submit SIPs satisfying Section 110(a)(2)(D)(i) requirements related to interstate transport. If EPA does not approve a state's SIP as being in compliance with Section 110(a)(2)(D)(i) by May 25, 2007, EPA may propose a Federal Implementation Plan (FIP) to address the state's transported air pollution. However, EPA is unlikely to do so provided a state satisfies the SIP requirement within a reasonable time after the required submission date.

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[1] Massachusetts was classified as a moderate nonattainment area statewide under the 8-hour ozone NAAQS. The final *Massachusetts State Implementation Plan To Demonstrate Attainment of the National Ambient Air Quality Standard (NAAQS) for Ozone* (the Ozone SIP),demonstrating how Massachusetts will attain the 8-hour ozone NAAQS by June 2010 is being submitted to EPA simultaneously with this Transport SIP.

[2] Massachusetts was designated as an unclassifiable/attainment area for the 1997 $PM_{2.5}$ NAAQS. EPA revised the 24-hour $PM_{2.5}$ NAAQS in December 2006. Massachusetts recommended that the state be designated attainment with respect the 2006 standard. EPA will finalize the designations under that standard in December 2009. This document relates only to the 1997 NAAQS.

[3] *Finding of Failure to Submit Section 110 State Implementation Plans for Interstate Transport for the National Ambient Air Quality Standards for 8-hour Ozone and $PM_{2.5}$.* (70 FR 21147, April 25, 2005).

## B. EPA's Clean Air Interstate Rule (CAIR)

In May 2005, EPA promulgated the Clean Air Interstate Rule (CAIR[4]), which partially addresses the interstate transport of air pollution. In CAIR, EPA determined that emissions of nitrogen oxides (NOx) in 25 states and the District of Columbia contribute significantly to nonattainment and interfere with maintenance of the 8-hour ozone standard in downwind states. EPA also determined that NOx and sulfur dioxide ($SO_2$) emissions from 23 states and the District of Columbia contribute significantly to nonattainment and interfere with maintenance of the $PM_{2.5}$ standard in downwind states. CAIR sets ozone season NOx caps for certain large electric generating units (EGUs) in each state identified as significantly contributing to downwind 8-hour ozone nonattainment. It sets annual NOx and $SO_2$ caps for EGUs in states identified as significantly contributing to downwind $PM_{2.5}$ nonattainment. (See Figure 1 - *States Covered by CAIR*)

EPA concluded that Massachusetts significantly contributes to ozone nonattainment in Connecticut and Rhode Island. Therefore, Massachusetts is subject to the CAIR seasonal program, which caps NOx emissions starting with the 2009 ozone season. EPA concluded that NOx and $SO_2$ emissions from Massachusetts do not significantly contribute to $PM_{2.5}$ nonattainment in any downwind states. Therefore, Massachusetts is not subject to the annual CAIR caps for NOx and $SO_2$ emissions.

C. Transport SIP Guidance

In August 2006, EPA issued Transport SIP Guidance[5] addressing what states should do to respond to EPA's finding that they have failed to submit SIPs satisfying the requirements of Section 110(a)(2)(D)(i). MassDEP has followed EPA's Transport SIP Guidance in demonstrating that it has met the Clean Air Act requirements. As discussed below, Massachusetts is also taking steps beyond what is called for in the Transport SIP Guidance to reduce emissions from Massachusetts sources that may impact downwind nonattainment areas.

# III Massachusetts Compliance with Section 110(a)(2)(D)(i)

## A. Ozone

### A.1 Massachusetts Contribution to Ozone Nonattainment

In CAIR, EPA concluded that Massachusetts is a significant contributor to ozone non-attainment in Kent County, Rhode Island and Middlesex County, Connecticut.[6] CAIR requires that a state identified as a significant contributor to downwind ozone nonattainment submit a SIP that requires NOx emission reductions equal to the reductions required by CAIR. The Transport SIP Guidance provides that, with respect to ozone, states subject to CAIR can meet their Section 110(a)(2)(D)(i) obligations with a

[4] "CAIR" refers to EPA's *Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule)*, 70 FR 25162, May 12, 2005. Massachusetts has adopted a state CAIR regulation (310 CMR 7.32) that implements the requirements of EPA's CAIR; it is referred to as "Mass CAIR."

[5] *Guidance for SIP Submissions to Meet Current Outstanding Obligations Under Section 110(a)(2)(D)(i) for the 8-Hour Ozone and $PM_{2.5}$ National Ambient Air Quality Standards*, August 15, 2006, Memorandum from William T. Harnett, Director, Air Quality Policy Division, to Regional Air Division Directors, Regions I – X.

[6] *Technical Support Document for the Final Clean Air Interstate Rule, Air Quality Modeling, Appendix E - 8-Hour Ozone: Average Ambient and Projected 2010/2015 Base and CAIR Control*, March 2005, U.S. EPA, Office of Air Quality Planning and Standards http://www.epa.gov/cair/pdfs/finaltech02.pdf

satisfactory CAIR SIP submission. MassDEP submitted its CAIR SIP to EPA on March 30, 2007. On December 3, 2007 (72 FR 67854), EPA fully approved the Massachusetts CAIR SIP, which imposes a cap on ozone season NOx emissions pursuant to the Massachusetts Clean Air Interstate Rule (Mass CAIR), 310 CMR 7.32. Thus, by complying with CAIR, Massachusetts has satisfied EPA's Transport SIP Guidance parameters with respect to ozone.

However, MassDEP believes that CAIR does not adequately address the impact of transport from those states that EPA identified as contributors to downwind ozone nonattainment. For example, Connecticut and Rhode Island, the states to which Massachusetts emissions significantly contribute to nonattainment, are classified as moderate ozone nonattainment areas. As such, they are required to demonstrate attainment by 2010. However, the air quality modeling that EPA performed in support of CAIR projects that in 2010, after implementation of CAIR and other state and federal control programs, the Kent County and Middlesex County monitors will still exceed the 8-hour ozone standard.[7] (See Table 1 below.)

In its CAIR analysis, EPA quantified the impact of upwind state emissions on downwind nonattainment. However, CAIR does not require that an upwind state reduce emissions so as to eliminate its impact on downwind nonattainment areas. Rather, EPA determined that contributing states are required to reduce emissions only in an amount equal to the reductions that can be achieved with "highly cost-effective" controls on EGUs, even if emissions from the state are still having an impact on downwind nonattainment.

MassDEP disagrees with EPA's conclusion that states need only reduce emissions in an amount equivalent to the reductions that can be achieved by the application of "highly cost-effective" controls on EGUs. MassDEP believes that CAIR should have required additional cost-effective reductions by upwind states that would have further reduced the impact of interstate transport on monitors that continue to model nonattainment as of the area's required attainment year.[8] Consistent with this view, MassDEP has taken a number of additional steps to further analyze and address its contribution to nonattainment in Connecticut and Rhode Island.

## A.2 Massachusetts Response to Ozone Contribution

### A.2.1 Control Measures

Because EPA's CAIR modeling demonstrated ozone nonattainment in a number of states within the Ozone Transport Region[9] even after implementation of CAIR, the Ozone Transport Commission (OTC) initiated a regional attainment planning process to consider what could be done to bring all areas within the OTC into attainment. The OTC planning process included review and analysis of the feasibility and potential reductions from a range of additional control measures. The outcome of this process was a

[7] See *Technical Support Document* cited in footnote 6.

[8] MassDEP so stated in its comments on EPA's January 2004 proposed rulemaking, *Rule To Reduce Interstate Transport of Fine Particulate Matter and Ozone (Interstate Air Quality Rule*), (69 FR 4566) and in its comments on EPA's June 2004 *Supplemental Proposal for the Rule To Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule*) (69 FR 32684).

[9] The Northeast Ozone Transport Region comprises Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and northern Virginia.

number of recommendations by the OTC to its member states to adopt additional controls on emissions of NOx and volatile organic compounds (VOCs) from certain source categories.[10]

Massachusetts participated in the OTC planning process and, along with other OTC states, committed to pursue additional control measures by 2009. Pursuant to that commitment, the final *Massachusetts* Ozone SIP[11] reflects that Massachusetts has adopted, or is committing to adopt, regulations to further reduce emissions from the following VOC source categories:

Consumer products
Architectural and Industrial Maintenance (AIM) coatings
Solvent metal degreasing
Adhesives and sealants application
Cutback and emulsified asphalt paving

In addition, MassDEP made all Massachusetts sources that were part of the NOx Allowance Trading Program, 310 CMR 7.28, subject to Mass CAIR. By including these sources in Mass CAIR, Massachusetts is limiting emissions from 15 NOx sources that do not meet EPA's CAIR applicability criteria and were not subject to CAIR.

With the adoption of these additional measures, Massachusetts will have reduced emissions of ozone precursors beyond the reductions anticipated and modeled by EPA in its CAIR analysis.

### A.2.2 OTC Ozone Modeling

In addition to a review of potential control measures, the OTC planning process included modeling[12] of OTC states' attainment status in the 2002 base year and in future years (2009 and 2012) under different control scenarios. Modeling was conducted based on two control scenarios: On-the-Books/On-the-Way controls (OTB/OTW) and Beyond On-the-Books/On-the-Way controls (BOTB/OTW).

The OTB/OTW control scenario includes the following control measures: NOx SIP Call, CAIR, federal on-road and off-road fuels, federal motor vehicle standards and state Low Emission Vehicle programs, federal MACT rules, 2001 OTC model rules and other state-specific rules, as adopted throughout the modeling domain, which included states outside of the OTC region. The BOTB/OTW control scenario includes the OTB/OTW controls plus the following additional measures, which the OTC included in the modeling and that states are expected to adopt: consumer products and portable fuel containers (except for VT); asphalt paving (except for DC, MD, ME, PA, VT); adhesives and sealants (except for NH and DC); Industrial, Commercial and Institutional (ICI) Boilers reduction in the 5-county region of Philadelphia, PA, and MD, NY and NJ; and individual state regulations covering non-EGU point sources.

[10] *Identification and Evaluation of Potential Control Measures, Final Technical Support Document*, February 28, 2007, prepared for Ozone Transport Commission by MACTEC Federal Programs, Inc. http://www.otcair.org/document.asp?fview=Report#

[11] As noted above, he final Ozone SIP is being submitted to EPA on the same date as this final Transport SIP. The additional control measures are discussed in Section 3 of the Ozone SIP.

[12] The OTC modeling differs from EPA's CAIR modeling in a number of respects, including: use of the CMAQ model (vs. CAMX); use of a 2002 ozone episode (vs. 1995); and updated 2002 base year and future year inventories.

The OTC modeling[13] results under the two control scenarios for the two monitors that, according to CAIR, are impacted by transport from Massachusetts are reflected in Table 1. The modeling results indicate that, with the BOTB/OTW control measures, both monitors will be in attainment by 2009[14].

Table 1 – Design Values (DV)[15] - CAIR and OTC Modeling (Ozone NAAQS = 85 parts per billion)

| County | OTC 2002 base case DV (with controls in effect in 2002) | EPA's CAIR Modeling 2010 projections | OTC 2009 DV with OTB/ OTW Controls | OTC 2009 DV with Beyond OTB/OTW Controls |
|---|---|---|---|---|
| Middlesex, CT | 95.7 | 90.6 | 85 | 84 |
| Kent, RI | 88.3 | 86.2 | 80 | 80 |

### A.2.3. Conclusion - Ozone

Consistent with EPA's Transport SIP Guidance, Massachusetts has met its Section 110(a)(2)(D)(i) obligations with its CAIR SIP submission, which was approved by EPA on December 3, 2007. Furthermore, with the adoption of CAIR and additional controls in Massachusetts and other OTC states, the two ozone monitors to which Massachusetts was determined to be a significant contributor, and that were predicted to still be in nonattainment in 2010 under EPA's CAIR analysis, are projected to be in attainment by 2009 under the OTC modeling. The OTC modeling further demonstrates that Massachusetts will not be a significant contributor to nonattainment in any downwind area by 2009. All other areas that are downwind of Massachusetts in New Hampshire and Maine are monitoring attainment of the 8-hour ozone standard as of the 2004 -2006 ozone seasons. Massachusetts will, therefore, not be a significant contributor to nonattainment in any downwind area by 2009

## B. $PM_{2.5}$ Nonattainment

In CAIR, EPA concluded that emissions of $SO_2$ and NOx from sources in Massachusetts do not significantly contribute to $PM_{2.5}$ nonattainment in other states and that Massachusetts is, therefore, not subject to the annual CAIR program. In the Transport SIP Guidance, EPA states that for states not subject to CAIR in whole or in part, a "negative declaration" supported by a technical demonstration that the state does not significantly contribute to downwind states, should be adequate to meet the requirements of Section 110(a)(2)(D)(i).

In CAIR, EPA applied a threshold of 0.2 micrograms per cubic meter ($\mu g/m^3$) for determining whether $SO_2$ and NOx emissions in a state significantly contribute to annual $PM_{2.5}$ nonattainment in another state.

[13] Extensive analysis and documentation of this modeling is in the final Ozone SIP, Section 5 – Attainment Demonstration

[14] EPA is requiring that moderate nonattainment areas use 2009 as the target year for attainment modeling in order to demonstrate attainment by June 2010.

[15] For the modeled attainment test, EPA guidance recommends averaging three design values that straddle the baseline inventory year (2002). Therefore, the 2002 design value is the average of the "2002 design value" (determined from 2000-2002 observations), the "2003 design value" (determined from 2001-2003 observations), and the "2004 design value" (determined from 2002-2004 observations). Percent ozone reductions predicted by the model are applied to the 2002 design value to obtain future year design values.

EPA's analysis demonstrated that Massachusetts' maximum-modeled downwind contribution to any other state was 0.07 $\mu g/m^3$.[16]

As with ozone, EPA determined that contributing states are only required to reduce emissions in an amount equal to the reductions that can be achieved through "highly cost-effective" controls on large EGUs. As previously noted, MassDEP disagrees with EPA's application of this test to limit the obligation of upwind states to address transport. However, given that the maximum contribution of Massachusetts to $PM_{2.5}$ nonattainment (0.07 $\mu g/m^3$ maximum) is so far below EPA's threshold of 0.2 $\mu g/m^3$, Massachusetts agrees with EPA's conclusion in CAIR that it is not significantly contributing to $PM_{2.5}$ nonattainment at any downwind monitor.

Furthermore, the baseline emissions inventory used in EPA's CAIR analysis overestimated emissions of NOx, $SO_2$ and $PM_{2.5}$ from non-road motor vehicles in Massachusetts. In CAIR, EPA used an older version (Version 2.3c, April 2004) of its NONROAD Model. For its 2002 Emission Inventory, MassDEP used EPA's newer NONROAD model (version 2005a, Feb. 2006) to estimate emissions from this category. With use of the new and improved model, Massachusetts emissions are dramatically lower as noted below. These more accurate emissions estimates demonstrate that the impact from Massachusetts sources on downwind $PM_{2.5}$ monitors is likely to be even less than demonstrated in the CAIR modeling.

Massachusetts Emissions Estimates - Non-Road Motor Vehicles

| (In tons per summer day) | CAIR non-road motor vehicle emissions (NONROAD version 2.3c) | MassDEP 2002 Inventory (NONROAD version 2005a) |
|---|---|---|
| NOx | 198.2 | 42.4 |
| SO2 | 30.1 | 6.3 |
| $PM_{2.5}$ | 19.1 | 4.3 |

Finally, the $PM_{2.5}$ nonattainment monitors nearest to any Massachusetts source are in the New York City metropolitan area. Meteorological patterns make it highly unlikely that Massachusetts emissions are transported in a southwesterly direction to impact these monitors. All monitors in Connecticut are monitoring attainment of the 1997 $PM_{2.5}$ standard.[17] All areas in New Hampshire and Maine that are downwind of Massachusetts are designated as $PM_{2.5}$ attainment areas under the 1997 standard. As noted in footnote 2, EPA adopted a lower 24-hour $PM_{2.5}$ standard in December 2006, but designations of areas as attainment or nonattainment of that standard will not be finalized until 2009.

Therefore, MassDEP concludes that it is not contributing significantly to, or interfering with maintenance of, the $PM_{2.5}$ NAAQS in any state.

C. New Source Review: Nonattainment and Prevention of Significant Deterioration

Under existing EPA regulations (40 CFR 51.165(b)(1)), each state must have a preconstruction review program for major sources. In nonattainment areas, the preconstruction review program is known as

[16] *Technical Support Document for the Final Clean Air Interstate Rule, Air Quality Modeling*, Appendix H – $PM_{2.5}$ Contributions to Each Nonattainment County in 2010, March 2005, U.S. EPA, Office of Air Quality Planning and Standards http://www.epa.gov/cair/pdfs/finaltech02.pdf

[17] For the 1997 $PM_{2.5}$ standard, New Haven County, CT is part of the New York-Northern New Jersey-Long Island $PM_{2.5}$ non-attainment area based on EPA's determination that it should be included within the nonattainment area boundaries. However, the New Haven County monitored readings do not exceed the 1997 $PM_{2.5}$ NAAQS.

Nonattainment New Source Review (NNSR). In attainment areas, preconstruction review is part of the Prevention of Significant Deterioration (PSD) program. EPA's Transport SIP Guidance states that for 8-hour ozone, states need only confirm that major sources are currently subject to PSD and NNSR permitting programs that implement the 8-hour ozone standard and that the state is on track to meet the June 15, 2007 deadline for SIP submissions adopting the requirements of the Phase II ozone rule. As noted above, MassDEP is submitting it final Ozone SIP to EPA on the same date as the Transport SIP. For $PM_{2.5,}$ states need only confirm that major sources are subject to PSD and NNSR permitting programs implemented in accordance with EPA's interim guidance calling for use of $PM_{10}$ as a surrogate for $PM_{2.5}$ in the PSD and NNSR programs.

Massachusetts regulation, 310 CMR 7.00 Appendix A: Emissions Offsets and Nonattainment Review, contains the Massachusetts preconstruction review program for stationary sources of NOx and VOCs, which are precursors to ozone. It requires approval for any new major stationary source or major modification at a major stationary source, where the stationary source is major for an air pollutant for which Massachusetts is nonattainment. Since Massachusetts is nonattainment for the 8-hour ozone NAAQS statewide, these requirements apply statewide. MassDEP does not need to change its NNSR regulations in order to meet 8-hour ozone requirements. The major source applicability thresholds of potential-to-emit (PTE) 50 tons per year of volatile organic compounds and PTE 50 tons per year of NOx that applied to it as a serious 1-hour ozone standard nonattainment area, continue to apply to it as a moderate 8-hour ozone standard nonattainment area.[18]

With respect to $PM_{2.5}$, Massachusetts is in attainment of the NAAQS statewide. MassDEP did not previously adopt PSD regulations for the $PM_{10}$ standards but instead took delegation of the federal PSD program (40 CFR 52.21) from EPA. In 2003, MassDEP returned delegation of the PSD program to EPA. EPA is currently implementing the PSD program for Massachusetts major stationary sources using $PM_{10}$ as a surrogate for $PM_{2.5}$.

D. Protection of Visibility

Section 110(a)(2)(D)(i) requires that 8-hour ozone SIPs (and for $PM_{2.5}$ nonattainment areas, $PM_{2.5}$ SIPs) must contain provisions prohibiting "…any source...or activity within the state from emitting any air pollutant in amounts which will…interfere with measures required to be included in the applicable implementation plan for any other state...to protect visibility" (emphasis added). The "applicable implementation plan" to protect visibility is the Regional Haze SIP, which states are required to submit to EPA in December 2007, pursuant to EPA's Regional Haze regulation (64 FR 35714; July 1, 1999).

States and Regional Planning Organizations are in the process of identifying those Class 1 areas[19] impacted by each states' emissions, and developing control strategies for inclusion in Regional Haze SIPs. In the Transport SIP Guidance, EPA concludes that it would be premature for states to assess in the Transport SIP whether their 8-hour ozone (and/or $PM_{2.5}$) attainment SIPs will interfere with "measures

[18] EPA's *Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard - Phase I* , 69 FR 23952, April 30, 2004, allowed areas to adopt the major source thresholds that applied to their 8-hour standard classification, even though the thresholds might be less stringent than those that applied to the area under the applicable 1-hour ozone standard classifications. In December 2006, the U.S. Court of Appeals for the D.C. Circuit vacated EPA's Phase 1 rule, holding that parts of the rule violated provisions of the CAA. The count concluded that the provision allowing an area to adopt less-stringent major source thresholds constituted illegal "backsliding." Even prior to this court decision, MassDEP decided to retain its 1-hour NOx RACT threshold of PTE 50 tons, rather than adopt the less-stringent PTE 100 ton threshold that EPA's rule would have allowed had it not been vacated.

[19] Class 1 Areas are certain large national parks and wilderness areas.

required to be included" in Regional Haze SIPs before Regional Haze SIPs are drafted. Therefore, EPA relieves a state of its obligations to assess this impact until such time as Regional Haze SIPs are submitted; it is requiring only that a state confirm that it is not possible to make this assessment at the time it submits its Transport SIP.

MANE-VU (Mid-Atlantic Northeast Visibility Union), the regional planning organization for the Northeast states, is developing emission reduction/visibility improvement goals that provide for reasonable progress towards achieving natural visibility by 2064 in Class 1 areas in the MANE-VU region. The reasonable progress goals for the first ten-year planning period will ensure improvement in visibility for the 20 percent most impaired days each year, and also ensure no degradation in visibility for the 20 percent least impaired days each year. The long-term strategy will include enforceable emission limitations, compliance schedules and other measures necessary to achieve the reasonable progress goals established by the states in which the protected areas are located. The emission reduction obligations of each state will be based on an analysis of monitoring and modeling data through a consultative process with the other states, MANE-VU and other regional planning organizations.

MassDEP agrees with, and confirms, EPA's conclusion that it is not possible to assess whether emissions from Massachusetts interfere with measures in any states' Regional Haze SIP until such Regional Haze SIPs are finalized.

## IV Conclusion

Massachusetts has met the requirements of Clean Air Act Section 110(a)(2)(D)(i) with respect to transported emissions and has responded to EPA's finding of failure to submit a SIP addressing the ozone and $PM_{2.5}$ NAAQS adopted in 1997. With respect to ozone, Massachusetts has met its transport obligations with adoption and submission of MassCAIR in March 2007, as a final SIP revision, which EPA fully approved on December 3, 2007. It has adopted, or is commiting to adopt additional controls on ozone precursor emissions as part of its final Ozone SIP to further reduce Massachusetts' contribution to interstate ozone formation in downwind areas that have been identified by EPA as being impacted by Massachusetts' emissions. Therefore, emissions from Massachusetts sources do not contribute significantly to other states' nonattainment, or interfere with maintenance of the 8-hour ozone or $PM_{2.5}$ NAAQS, or otherwise interfere with other states' efforts to prevent significant deterioration of air quality. Massachusetts will assess the impact of its emissions on visibility in other states through the MANE-VU consultation process and with the submission of its Regional Haze SIP.

# Figure 1

## STATES COVERED BY CAIR